

Claims:

No claim amendments are made in this response, The following listing of claims is included merely to provide continuity across application documents and as a convenience to the Examiner.

- 5 The following listing of claims replaces all previous listings of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A method for program debugging, the method comprising:

- 10 setting a plurality of breakpoints corresponding to a plurality of events in a Basic Input/Output System (BIOS) program code, each event being a test executed by the BIOS program code to a peripheral device and taking a general processing path when the peripheral device is working well or an error processing path when the peripheral device is in an error state;
executing the BIOS program code for outputting a diagnosis code of a
15 breakpoint;
setting a parameter to simulate the peripheral device is working well throughout execution of the event corresponding to the diagnosis code;
executing the event corresponding to the diagnosis code according to the parameter for making the event undergo the general processing path;
20 resetting the parameter to simulate the peripheral device being in the error state throughout execution of the event corresponding to the diagnosis code; and
executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path.

- 25 Claim 2 (canceled)

Claim 3 (original): The method of claim 1 wherein the breakpoints are set ahead of program codes of the corresponding events.

- 30 Claim 4 (original): The method of claim 1 wherein the breakpoints are set after

program codes of the corresponding events.

Claim 5 (canceled)

- 5 Claim 6 (previously presented): The method of claim 1 wherein the error processing path produces an audible tone.

Claim 7 (previously presented): The method of claim 1 wherein the error processing path causes a system reset.

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Claim 8 (previously presented): The method of claim 1 wherein the error processing path causes a system execution interrupt.

Claims 9-16 (canceled)

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Claim 17 (previously presented): The method of claim 1 further comprising:
executing the BIOS program code until the diagnosis code of the breakpoint
matches a predetermined diagnosis code before resetting the parameter of
the event corresponding to the diagnosis code, and executing the event
20 corresponding to the diagnosis code according to the reset parameter for
making the event undergo the error processing path.

Claim 18 (previously presented): A method for program debugging, the method comprising:

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setting a plurality of breakpoints corresponding to a plurality of events in a driver program code, each event being a test executed by the driver program code to a peripheral device and taking a general processing path when the peripheral device is working well or an error processing path when the peripheral device is in an error state;

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setting a parameter to simulate that the peripheral device is working well

throughout execution of the driver program code;
executing the driver program code according to the parameter for outputting a
diagnosis code corresponding to each breakpoint;
for each breakpoint, determining whether the diagnosis code matches a user
5 defined diagnosis code; and
resetting the parameter to simulate that the peripheral device is in the error state
and executing the event corresponding to the diagnosis code according to
the reset parameter for making the event undergo the error processing path
when it is determined that the diagnosis code matches the user defined
10 diagnosis code.

Claim 19 (previously presented): The method of claim 18 further comprising
continuing execution of the driver program code to a next breakpoint without
resetting the parameter when it is determined that the diagnosis code does not
15 match the user defined diagnosis code.

Claim 20 (canceled)

Claim 21 (previously presented): The method of claim 1 further comprising executing
20 both the general processing path and the error processing path of all events of the
plurality of events.

Claim 22 (previously presented): A method for program debugging, the method
comprising:
25 setting a plurality of breakpoints corresponding to a plurality of events in a Basic
Input/Output System (BIOS) program code, each event being a test executed
by the BIOS program code to a peripheral device and taking a general
processing path when the peripheral device is working well and taking a
generic event error handling path or a critical error path when the peripheral
30 device is in an error state according to the error state, the path taken

determined by a parameter;
setting the parameter to determine the general processing path;
executing the BIOS program code according to the parameter for outputting a
diagnosis code at each of the breakpoints, each diagnosis code uniquely
5 indicating the event corresponding to the breakpoint;
when the outputted diagnostic code matches a predetermined diagnostic code,
resetting the parameter to determine which of the generic event error
handling path or the critical error path is to be taken;
when the reset parameter determines the generic event error handling path is to
10 be taken, executing the BIOS program code according to the reset parameter;
and
when the reset parameter determines the critical event error handling path is to be
taken, executing the BIOS program code according to the reset parameter.

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